



Rehabilitation after Eruption of Merapi Mountain Through Utilization of Hydrant Pump Without Fuel to Overcome Water Shortages in Tlogolele Village, Selo, Boyolali

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ABSTRACT

The eruption of Merapi Mountain Yogyakarta in 2010 caused the damage of water-installation tool in Belang hamlet, Tlogolele village, Selo district, Boyolali county, Central Java. It caused the people in Belang hamlet difficult to gain clean water. The people had to walk far away to gain clean water for their sanitation and drinks, so a tool was needed very much for taking the clean water. Hydrant pump is simple to make and maintain. It can last for a long time. Fuel, lubricant, and electricity are not needed. We conducted this community service program for eight months, from April 2013 to November 2013 in Belang, Tlogolele, Selo, Boyolali. The purposes of making this hydrant pump are to overcome water shortages and to improve the welfare of society. The hydrant pump needed a water-resource reservoir to help the pressure which is needed by hydrant pump. This pressure will be used as dynamic pressure to lift water up from low place to higher place. In this program, we conducted some stages that is observation, socialization, pump manufacturing, pump installation, pump testing, pump utilization, pump developing, and pump maintenance. This hydrant pump program uses a hydrant pump with dimension of 4 inch which able to raise 80-meter-high water in 500-meter distance. The cost which was used for this program is Rp11.330.000,00. Rp.10.500.000,00 from DIKTI and Rp. 830.000,00 from the people of Belang. The innovation of using hydrant pump without foil becomes solution to handle water shortages in Belang. This program is put to good use by the people for gaining clean water. This program also successfully encourages people to solve water shortages in Belang. Furthermore, the result of this program is that the people start learning about hydrant pump so that the community can utilize this technology for agriculture and animal husbandry.

Keywords : *water shortages, tlogolele village, Hydrant pump*

Details :

Category : Mechanical Engineering; Type : Scientific Article, Language : English.